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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KYLE, CHARLES R

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,252

Applicant(s)

DAVIS ET AL.

Examiner

Charles R Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It recites the phrase "high speed processor," which is indefinite. Today's high speed processor may be tomorrow's slow speed processor.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2 and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,661,352 *Tiernay et al.*

With respect to Claim 1, *Tiernay* discloses the invention as claimed, including in a transaction management system for facilitating the managing and processing of transactions between multiple users and collection systems (Col. 2, line 56 to Col. 3, line 52), said transaction management system comprising:

a transponder device configured for receiving and transmitting user information (Fig. 3, ele. 23; Col. 2, line 56 to Col. 3, line 30);

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a reader module configured for communicating with said transponder device to facilitate assessment of said user information (Fig. 3, ele. 29; Col. 8, lines 16-54);

a transaction management module coupled to said reader module and being configured to authenticate said user information (Col. 3, lines 18-23) and to authorize and secure payment transactions (Fig. 3, ele. 24; Col. 8, lines 23-54), wherein said transaction management module can expedite transaction processing by providing authorization of payment transactions while said transponder device is in communication with a toll collection system (Col. 2, line 56 to Col.3, line 10); and

a processing system configured for processing collected user transactions for the reconciliation and settlement of a user account based on secured processing by said transaction management module (Col. 11, lines 40-46).

With respect to Claim 2, *Tiernay* further discloses a smart card device for storing user value (Col. 2, line 56 to Col. 3, line 52), a transponder unit to access the smart card and facilitate communications between the transponder device and reader (Col. 3, lines 11-14) wherein debiting of the smart card is directly through the smart card (Col. 3, lines 11-30).

Regarding Claim 12, see the discussion of Claims 1 and 2; Claim 12 is effectively a method form of these. *Tiernay* further discloses verification of a smart card balance at Col. 3, lines 18-23.

With respect to Claim 13, see the discussion of Claim 12 and *Tiernay* further discloses the recited processing sequence at Col. 3, lines 44-52.

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With respect to Claim 14, *Tiernay* further discloses:

verifying the payment transaction by receiving the user information from said transponder device in a toll reader module, said toll reader module requesting verification from said transaction management module, and providing a verification of payment from said transaction management module (Col. 8, lines 16-26);

validating to a controller that the payment transaction has been verified such that said controller can permit access to a user for another location (Col. 8, line 55 to Col. 9, line 8);

and wherein said payment transaction is completed while said transponder device is in communication with said toll reader module (Col. 8, lines 16-26).

See also Col. 8, line 15 to Col. 10, line 32.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6, 7, 11, 15-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,661,352 *Tiernay et al.*

With respect to Claim 3, *Tiernay* discloses the invention substantially as claimed.
Tiernay further discloses a security module as claimed at Col. 9, line 66 to Col. 10, line 32.
Tiernay does not specifically disclose a processor and memory within the transaction processor.
Official Notice is taken that central processing units associated with memory were old and well

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known at the time of the invention for transaction processing. For example, credit and debit processing were performed by such hardware. It would have been obvious to one of ordinary skill in the art at the time of the invention to include these elements in *Tiernay* to allow rapid transaction processing.

With respect to Claim 4, *Tiernay* discloses a cryptogram at Col. 6, lines 30-38.

With respect to Claim 5, *Tiernay* discloses interface between security module and a smart card at Col. 9, lines 38-59.

Concerning Claims 6 and 11, *Tiernay* does not specifically disclose the recited elements which serve to isolate the connection system/manager. *Tiernay* does however suggest this limitation, in that the smart card/transponder and transaction manager are the active elements in validation, verification and debiting. The connection manager (reader 29) merely serves as an isolated conduit for transmissions between the other two elements, 23 and 24. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Tiernay* to further clearly isolate the connection manager (reader 29) of *Tiernay* from information to provide improved "internal control" of financial data. Limiting access to such data would provide fewer opportunities for interception of financial data by unscrupulous parties. See *Tiernay* at Col. 8, line 6 to Col. 10, line 32.

With respect to Claim 7, *Tiernay* discloses collection at Fig. 3. *Tiernay* does not specifically disclose batch processing of transactions. Official Notice is taken that batch processing of transactions was old and well known at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Tiernay* to perform batch processing of transactions because this would allow grouped processing of

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transactions for collection using processing equipment at less busy times, thereby improving processing efficiency.

With respect to Claim 15, see the discussion of Claim 14 and it would be obvious to perform validation before payment processing so as to allow a vehicle to pass in a timely manner and to postpone accounting functions suitable for a later time.

With respect to Claim 16, see the discussion of Claims 13 and 7.

With respect to Claim 17, see the discussion of Claims 12 and 4.

With respect to Claim 19, see the discussion of Claim 12. Claim 19 recites a multiplicity of transaction processes. As to this recitation multiplicity of transaction processes, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide such plural functional elements in a system for transaction processing since it has been held that duplicating a part for a multiple effect is obvious. *In re Harza*, 274 F.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,661,352 *Tiernay et al* in view of US 4,338,587 *Chiappetti et al*.

With respect to Claim 8, *Tiernay* discloses the invention substantially as claimed. See the discussion of Claim 2. *Tiernay* discloses the use of its invention in the particular context of fare collection for cars on toll roads. *Chiappetti* additionally discloses toll collection contexts of tunnels, bridges, parking lots, etc. at Col. 7, lines 49-63. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a context manager to provide

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functionality of *Tiernay* in several contexts such as those of *Chiappetti* because this would broaden market.

Claim 9, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,661,352 *Tiernay et al* in view of US2001/0034677 *Farhat et al*.

With respect to Claim 9, *Tiernay* discloses the invention substantially as claimed. See the discussion of Claim 2. *Tiernay* does not specifically disclose a transaction normalization module. *Farhat* discloses this limitation at paras. 65 to 78, at least. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Tiernay* to include the transaction normalization of *Farhat* because this would provide a *lingua franca* for the processing of transaction data. Further, such common, normalized formats such as EDI are old and well known in financial data processing.

With respect to Claims 18 and 20, see the discussion of Claims 12 and 10. Further with respect to Claim 18, a broad reasonable reading of the language requires no more than that a toll system have plural booths in a common site in which a common protocol is used. See Fig. 1 of *Tiernay*.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,661,352 *Tiernay et al* in view of US2001/0026619 A1 *Howard, JR. et al*.

With respect to Claim 10, *Tiernay* discloses the invention substantially as claimed. See the discussion of Claim 2. *Tiernay* does not specifically disclose a key management module. *Howard, JR.* discloses this limitation at paras. 73-80, at least. It would have been obvious to one

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of ordinary skill in the art at the time of the invention to modify *Tiernay* to include the key management module of Howard, *JR.* because this would provide a secure mechanism for control and distribution of cryptographic keys used in financial transactions.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kyle whose telephone number is (703) 305-4458. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent A Millin can be reached on (703) 308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

crk
April 12, 2005

Examiner Charles Kyle

